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10/594,283

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Joaquin Espuelas Penalva

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7590

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EXAMINER

CHOI, PETER Y

ART UNIT

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1794

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,283	<b>Applicant(s)</b> PENALVA, JOAQUIN ESPUELAS	
	<b>Examiner</b> Peter Y. Choi	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 28-52 is/are pending in the application.
- 4a) Of the above claim(s) 31-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-30 and 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/26/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **NON-FINAL ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 28-30 and 52, in the reply filed on February 15, 2008, is acknowledged. The traversal is on the grounds that Group II should be considered with the claims of Group I as the search conducted by the Examiner with regard to the claims of Group I would include the art relevant to the claims of Group II as well. Likewise the inclusion of the claims of both Group I and II would not place an undo burden on the Examiner. This is not found persuasive because the inventions listed do not relate to a single general inventive concept under PCT Rule 13.1, as demonstrated by the anticipatory references cited on the International Search Report and set forth in this Non-Final Rejection. Therefore, the special technical feature of the claimed invention is anticipated or rendered obvious in view of the art. Additionally, Applicant's arguments are not persuasive because the Applicant provided no evidence that the search for Group I would include all the art relevant to Group II.

Claims 31-51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

2. The disclosure is objected to because of the following informalities: the specification refers to claims of the currently examined application. Reference to a currently examined claim in the specification is required to be removed since the claim may be amended which would

Art Unit: 1794

therefore amend the specification which is improper. Additionally, the specification references claims which have already been cancelled. Additionally, please amend the specification to remove any reference to “this patent” or “main patent” or “additional patent” etc. as it is difficult to discern which patent the specification refers.

Appropriate corrections are required.

### ***Claim Objections***

3. Claims 28-30 and 52 are objected to because of the following informalities: each of the claims recites “*Legionella Pneumofila*.” However, the specification spells the bacteria as “*Legionella Pneumophila*.” In response to this Non-Final Rejection, amend the claims with the spelling consistent with the specification. Additionally, claim 29 appears to be missing “of” between “formed from a mixture” and “two or more fibers.” Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-30 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 28-30 and 52, claim 28 recites that the non-woven fabric is formed from artificial, synthetic fibers, wherein the fibers may be natural polymer chemical fibers. It is unclear how the fibers may be natural polymer chemical fibers when the fibers are additionally required to be artificial, synthetic fibers. Additionally, claim 28 recites that the fibers are alternatively “selected from a group consisting of” various fibers. Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being “selected from the group consisting of A, B and C.” When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if “wherein R is a material selected from the group consisting of A, B, C and D” is a proper limitation, then “wherein R is A, B, C or D” shall also be considered proper. As presently claimed, the fiber selection is inconsistent with Markush group language.

Regarding claim 29, the claim recites a mixture of fibers in a proportion of 0.5 to 99.5%. It is unclear whether the percentage is referring to the composition of the fibers or the weight percentage of the fibers.

Regarding claim 30, the claim recites “a density in the range of thickness of 0.1 to 15 cm.” However, the claim has already set forth fiber thickness in the range of 0.02 to 1,500 deniers. It is unclear what the scope of the fiber thickness is intended since varying thicknesses are set forth in the claim. Additionally, it is unclear what is intended by a “density in the range of thicknesses.” Is Applicant merely setting forth that the fiber has a density or is density determined in relation to a range of fiber thickness?

Regarding claim 52, the claim recites that the filter further comprises “obtaining the filter by conventional filament fabric methods.” It is unclear as to what the scope of “conventional filament fabric methods” entails as “conventional” methods relate to myriad possible fabric methods which vary considerably and which result in considerably different filter configurations, outside the scope of the invention claimed and disclosed.

***Claim Rejections - 35 USC § 102/103***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 28, 29 and 52 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Pub. No. 2003/0031687 to Falder.

Regarding claims 28, 29 and 52, Falder teaches a filter for filtration and elimination of *Legionella Pneumofila* in any installation at risk from *Legionella Pneumofila* proliferation comprising a non-woven fabric formed from artificial, synthetic fibers cut or in monofilaments and their mixtures previously treated with anti-bacterial compounds, wherein the fibers are selected from a group consisting of natural polymer chemical fibers which have or have not been

Art Unit: 1794

modified, synthetic polymer chemical fibers, glass fibers, carbon fibers, other fibrous materials, bicomponents, and polycomponents (see entire document including paragraphs 0001, 0030-0032, 0045-0087, 0090-0101, 0250-0285, Tables 13-15).

Regarding claim 29, the non-woven fabric is formed from a mixture of two or more fibers and wherein the mixture of two or more fibers is in a proportion of 0.5 to 99.5% (paragraphs 0090-0101). Additionally, it would have been obvious to one of ordinary skill in the anti-bacterial filter art to optimize the percentages of the blend of fibers since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In the present invention one would have been motivated to optimize the percentage of the fibers in order to form a functional material formed from blended fibers suitable for the desired applications set forth in the disclosure of Falder.

Regarding claim 52, Falder does not appear to specifically teach that the filter further comprises obtaining the filter by conventional filament fabric methods, although Falder sets forth various applications (paragraphs 0090-0101). However, it should be noted that the filter of claim 28, from which claim 52 depends, claims a filter product and the limitation set forth in claim 52 appears to recite a product by process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (a non-woven filter comprising synthetic fibers and an anti-bacterial used for filtration and elimination of Legionella Pneumofila) is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its

Art Unit: 1794

method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. The burden has been shifted to Applicant to show unobvious difference between the claimed product and the prior art product. The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if Applicant intends to rely on Examples in the specification or in a submitted declaration to show unobviousness, Applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

In the event it is shown that Falder does not disclose the claimed invention with sufficient specificity, the invention is obvious because Falder discloses the claimed constituents and discloses that they may be used in combination.

7. Claims 28-30 and 52 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Pub. No. 2003/0170453 to Foss.

Regarding claims 28-30 and 52, Foss teaches a filter in any installation at risk from Legionella Pneumofila proliferation comprising a non-woven fabric formed from artificial, synthetic fibers cut or in monofilaments and their mixtures previously treated with anti-bacterial compounds, wherein the fibers are selected from a group consisting of natural polymer chemical fibers which have or have not been modified, synthetic polymer chemical fibers, glass fibers, carbon fibers, other fibrous materials, bicomponents, and polycomponents (see entire document including paragraphs 0002-0013, 0089-0120, 0145, 0167-0180, 0211-0231, 0264-0278, 0287-0298, 0369, 0398, 0399).



Regarding claims 28-30 and 52, Foss does not appear to specifically teach that the filter is used for filtration and elimination of Legionella Pneumofila. However, the limitation is a recitation of the intended use of the filter. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since Foss teaches a substantially similar structure and composition as the claimed invention, the invention of Foss appears to be capable of use as a filter for filtration and elimination of Legionella Pneumofila.

Regarding claim 29, the non-woven fabric is formed from a mixture of two or more fibers and wherein the mixture of two or more fibers is in a proportion of 0.5 to 99.5% (paragraphs 0145, 0211-0231).

Regarding claim 30, the fibers have a fiber thickness in the range of 0.02 to 1,500 deniers, cross section selected from a group consisting of circular, square, elliptical, hollow, trilobal, flat and similar, and a length in the range of 0.1 mm to 500 mm or continuous filaments (paragraphs 0089-0120, 0145, 0211-0231).

Regarding claim 30, Foss does not appear to specifically teach a density in the range of thicknesses of 0.1 to 15 cm, a weight in the range of from 5 to 2,500 grams, a fusion point in the range of from 60° C to 450° C, and a range in color from translucent / white to black and any combinations thereof. Although the prior art does not disclose claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the Foss reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention. Products of identical structure and composition cannot have mutually

Art Unit: 1794

exclusive properties. The burden is on the Applicant to prove otherwise. Additionally, since the fibers of Foss appear to be identical and/or substantially similar to the fibers disclosed in Applicant's specification pages 29-33, and the fibers of Foss comprise the claimed fiber thickness, cross section and length, it is reasonable to presume that those fibers additionally comprise the identical and/or substantially similar density in the range of thicknesses of 0.1 to 15 cm, weight, fusion point, and color absent evidence to the contrary. It should be noted that the fibers of Foss may additionally be dyed (*see for example* paragraph 0120) and that fibers inherently possess a color from white to black in the color spectrum.

Regarding claim 52, Foss appears to teach that the filter further comprises obtaining the filter by conventional filament fabric methods (paragraphs 0002-0013, 0089-0120, 0145, 0167-0180, 0211-0231, 0264-0278, 0287-0298, 0369, 0398, 0399).). However, it should be noted that the filter of claim 28, from which claim 52 depends, claims a filter product and the limitation set forth in claim 52 appears to recite a product by process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (a non-woven filter comprising synthetic fibers and an anti-bacterial used for filtration and elimination of *Legionella Pneumofila*) is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.

In the event it is shown that Foss does not disclose the claimed invention with sufficient specificity, the invention is obvious because Foss discloses the claimed constituents and discloses that they may be used in combination.

***Claim Rejections - 35 USC § 103***

8. Claim 30 is rejected under 35 U.S.C. 103(a) as obvious over Falder in view of Foss.

Regarding claim 30, Falder does not appear to teach that the fibers have a fiber thickness in the range of 0.02 to 1,500 deniers, cross section selected from a group consisting of circular, square, elliptical, hollow, trilobal, flat and similar, and a length in the range of 0.1 mm to 500 mm or continuous filaments. Since Falder is silent with regards to the specific configuration of the filter, it would have been necessary and thus obvious to look to the prior art for conventional configurations. Foss provides this conventional teaching showing that it is known in the anti-bacterial filter art to form a conventional filter having a fiber thickness of 0.7 dTex to 25.0 dTex, a cross section selected from a group consisting of circular, square, elliptical, hollow, trilobal, flat and similar, and a length in the range of 1.0 mm to 180 mm (Falder, paragraphs 0089-0120, 0145, 0211-0231). Therefore, it would have been obvious to one having ordinary skill in the anti-bacterial filter art at the time the invention was made to make the anti-bacterial filter of Falder, with the configuration as taught by Foss, motivated by the expectation of forming a conventional filter with a configuration and specification known in the art to be predictably suitable for use as an anti-bacterial filter.

Regarding claim 30, Falder in view of Foss does not appear to specifically teach a density in the range of thicknesses of 0.1 to 15 cm, a weight in the range of from 5 to 2,500 grams, a fusion point in the range of from 60° C to 450° C, and a range in color from translucent / white to black and any combinations thereof. Although the prior art does not disclose claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the prior art combination teaches an invention with a substantially similar structure and chemical

Art Unit: 1794

composition as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicant to prove otherwise.

Additionally, since the fibers of Falder and Foss appear to be identical and/or substantially similar to the fibers disclosed in Applicant's specification pages 29-33, and the fibers of Falder in view of Foss comprise the claimed fiber thickness, cross section and length, it is reasonable to presume that those fibers additionally comprise the identical and/or substantially similar density in the range of thicknesses of 0.1 to 15 cm, weight, fusion point, and color absent evidence to the contrary. It should be noted that the fibers of Foss may additionally be dyed (*see for example* paragraph 0120) and that fibers inherently possess a color from white to black in the color spectrum.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571)272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/  
Primary Examiner, Art Unit 1794

/Peter Y. Choi/  
Examiner, Art Unit 1794  
March 12, 2008